MARCH/FY06

FORT STEWART

Georgia

Army Defense Environmental Restoration Program

Installation Action Plan

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Statement of Purpose

The purpose of the Installation Action Plan (IAP) is to outline the total multi-year Cleanup Program for an installation. The plan identifies environmental cleanup requirements at each site or area of concern, and proposes a comprehensive, installation-wide approach, with associated costs and schedules, to conduct investigations and necessary remedial actions.

In an effort to coordinate planning information between the Installation Manager, US Army Environmental Center (USAEC), executing agencies, regulatory agencies, and the public, an IAP has been completed for Fort Stewart. The IAP is used to track requirements, schedules and budgets for all major Army installation restoration programs.

All site-specific funding and schedule information has been prepared according to projected overall Army funding levels and is, therefore, subject to change.

The following persons contributed to the formulation and completion of this Installation Action Plan at the IAP Workshop held 9-12 January 2006:

USAEC - IERD

USAEC - IERD

USAEC

USACE- Savannah

CC - Ft. Stewart

EEI - IRP Support

USACE- Savannah

EEI - IRP Support

Ft. Stewart - DPW

IMA - SERO

EEI - IRP Manager

USACE- Savannah

Acronyms & Abbreviations

AAFES Army, Air Force Exchange Services

ACL Alternate Concentration Level

ACSIM Assistant Chief of Staff for Installation Management

AEDB-CC Army Environmental Database, Compliance-Related Cleanup

AEDB-R Army Environmental Database, Restoration

AST Aboveground Storage Tank

bgs below ground surface

BTEX Benzene, Toluene, Ethylbenzene and Xylene

CAP Corrective Action Plan

CC Compliance-related Cleanup

CERCLA Comprehensive Environmental Response, Compensation and Liability Act

1980

COL Colonel cy cubic yards

DA Department of Army DD Decision Document

DERA Defense Environmental Restoration Account (currently called ER,A)

DESC Defense Energy Supply Center
DMM Discarded Military Munitions

DOIM Department of Information Management

DPW Directorate of Public Works

DRMO Defense Reutilization and Marketing Office

EN Engineer

ENRD Environmental Natural Resources Division

EOD Explosive Ordnance Detachment

EPA United States Environmental Protection Agency

ER,A Environmental Restoration, Army (formerly called DERA)

FRA Final Remedial Action

FS Feasibility Study FST Fort Stewart FY Fiscal Year

GEPD Georgia Department of Natural Resources, Environmental Protection

Division

gpd gallons per day

GUST Georgia Underground Storage Tank (regulations)

GW Groundwater

HAAF Hunter Army Airfield

Haz Hazardous

HW Hazardous Waste
IAP Installation Action Plan
IAW In Accordance With
IRA Interim Remedial Action

IRP Installation Restoration Program
IWQS In Stream Water Quality Standards
IWTP Industrial Wastewater Treatment Plant

JP-4 Jet Propellant Number Four

Acronyms & Abbreviations

JP-8 Jet Propellant Number Eight LNAPL Light Non-Aqueous Phase Liquid

LTM Long-Term Management

LUST Leaking Underground Storage Tank

MC Munitions Constituents

MCL Maximum Contaminant Level

MILCON Military Construction

MMRP Military Munitions Response Program

MNA Monitored Natural Attenuation

MOGAS Motor Gasoline
MW Monitoring Well
NE Not Evaluated
NFA No Further Action

NFAR No further action required NGTC National Guard Training Center

NOV Notice of Violation

NPDES National Pollution Discharge Elimination System

NPL National Priorities List

OB/OD Open Burning / Open Detonation
OMA Operations and Maintenance – Army

OWS Oil and Water Separator
PA Preliminary Assessment
PAH Poly Aromatic Hydrocarbons
PCB Polychlorinated Biphenyls
POL Petroleum, Oil and Lubricants
POM Program, Operation, Management

ppb Parts Per Billion

PY Prior Year QTR Quarter

RA Remedial Action

RA(C) Remedial Action - Construction
RA(O) Remedial Action - Operation
RAB Restoration Advisory Board
RBC Risk-based concentrations

RC Response Complete

RCRA Resource Conservation and Recovery Act

RD Remedial Design

REM Removal

RFA RCRA Facility Assessment RFI RCRA Facility Investigation RI Remedial Investigation

RIP Remedy in Place

RRSE Relative Risk Site Evaluation S&R Supervision and Remediation

SI Site Inspection

SVE Soil Vapor Extraction

SVOC Semi Volatile Organic Compounds

Acronyms & Abbreviations

SWMU Solid Waste Management Unit

TAC-X Fort Stewart's Non-Commissioned Officer Academy

TCLP Toxicity Characteristic Leaching Procedure

TPH Total Petroleum Hydrocarbons TSCA Toxic Substances Control Act

ug/L Micrograms per liter

USACE United States Army Corps of Engineers

USACHPPM United States Army Center for Health Promotion and Preventive Medicine

USAEC United States Army Environmental Center

USAEHA United States Army Environmental Hygiene Agency (currently called

USACHPPM)

USATHAMA United States Army Toxic and Hazardous Material Agency

(currently called USAEC)

USEPA United States Environmental Protection Agency

UST Underground Storage Tank
UXO Unexploded Ordinance
USTMP UST Management Program
VOC Volatile Organic Compounds

WAAF Wright Army Airfield

Installation Information

Installation Locale: Fort Stewart is located on 279,000 acres of heavily wooded land in southeast Georgia. The cantonment area, located in the southern portion of the Installation, is adjacent to the city of Hinesville, Georgia in Liberty County. The Installation is bisected by Georgia Highway 119, which runs north to south from Pembroke to Hinesville, and Georgia Highway 144, which runs east to west from the towns of Richmond Hill to Glenville.

Installation Mission: The mission of the Fort Stewart/Hunter Army Airfield complex is to sustain a quality of life and installation support at the level necessary for division, non-divisional, tenant, and reserve component units to accomplish their training mission.

Lead Organization: Installation Management Agency, Southeast Regional

Leading Executing Agencies: Corps of Engineers

Regulatory Participation:

Federal: U.S. Environmental Protection Agency, Region IV

State: Georgia Department of Natural Resources, Environmental Protection Division RCRA Compliance Group: Subpart B Permit, Subpart X Permit, SWMUs USTMP: All

existing and former USTs.

NPL Status:

No NPL sites have been identified at Fort Stewart.

Installation Restoration Advisory Board (RAB), Technical Review Committee (TRC), Technical Assistance for Public Participation (TAPP) Status: No RAB/TRC/TAPP current at Ft Stewart. The public was last surveyed for interest in FY03 May.

Program Summaries:

IRP

Primary Contaminants of Concern: Metals, VOCs, SVOCs, TPH, Explosive Residues

Affected Media of Concern: Soil, Groundwater, Surface Water, Sediment Estimated Date for Remedy-In-Place (RIP)/Response Complete (RC: 2047

Funding to date (up to FY05): \$20,498K Cost-to-Complete (FY07+): \$5,738K

MMRP

Primary Contaminants of Concern: UXO, DMM, and MC

Affected Media of Concern: Soil, Sediment, Groundwater, and Surface Water Estimated Date for Remedy-In-Place (RIP)/Response Complete (RC: 2015+

Funding to date (up to FY05): \$93824K Cost-to-Complete (FY07+): \$16,637K

BRAC

There are no BRAC sites at Ft Stewart

Cleanup Program Summary

Installation Historic Activity: Fort Stewart was originally established in June of 1940 as an Antiaircraft Artillery Training Center to prepare artillery troops for overseas deployment. Training activities associated with World War II (WWII) decreased by the end of 1944. Between January and September 1945, the Installation operated as a prisoner of war (POW) camp, housed two Italian units, and served as a separation center. Fort Stewart was deactivated in September 1945.

In August 1950, Fort Stewart was reactivated to train antiaircraft artillery units for the Korean Conflict. The training mission was expanded to include armor training concurrent with antiaircraft artillery training in 1953. In 1956, Fort Stewart was designated a permanent army installation and an element of the U.S. Army Aviation School from Fort Rucker, Alabama was stationed there from 1966 to 1973.

The 1st Battalion, 75th Infantry (Ranger) was activated at Fort Stewart on January 31, 1974. Fort Stewart became a training and maneuver area providing tank, field artillery, helicopter gunnery, and small arms training for regular Army, U.S. Army Reserve, and National Guard units. The 24th Infantry Division (Mechanized) was permanently stationed at Fort Stewart in 1975. The 24th Infantry Division was active during the Persian Gulf War in 1991, and was reflagged as the 3d Infantry Division in May 1996.

The Chief of Staff of the Army has directed reorganization of the 3rd Infantry Division from brigades into smaller self-contained "units of action" that can survive independently on a battlefield, creating a complete battle ready combat force in a small package. With more units than brigades soldier's deployment rotation would occur less frequently for shorter periods of time. With Operation Iraqi Freedom and Operation Enduring Freedom ongoing, as well as many other possible future missions, this restructuring would lend support to the Global War on Terrorism.

Fort Stewart presently accommodates three brigades that would be incorporated into four Units of Action, so additional facilities would be needed in order to accommodate four Units of Action. The new Unit of Action will consist of 3,670 soldiers. Fort Stewart currently accommodates many of these soldiers and their equipment in their current brigade configuration that would be reassigned to the new 4th Unit of Action. Approximately 2000 additional soldiers to complete the Unit of Action will be arriving at Fort Stewart in July 2004.

Current Activity:

Mission: The mission of Fort Stewart/Hunter Army Airfield complex is to sustain a quality of life and installation support at the level necessary for division, non-divisional, tenant, and reserve component units to accomplish their training mission.

Lead Regulators:

U.S. Environmental Protection Agency, Region IV Georgia Department of Natural Resources, Environmental Protection Division

Cleanup Program Summary

Regulatory Status:

- No enforcement actions or NOVs have been issued against Fort Stewart's sites.
- RCRA Part B permit: Hazardous Waste Storage. (Expiration Date August 13, 2007)
- NPDES Permit: Stormwater Discharge (Exp. Date-None) Wastewater Discharge TAC-X & Evans (Exp. Date November 30, 2010)
- Industrial Wastewater Treatment Plant (Exp. Date November 30, 2010)
- Land Application, WAAF and Camp Oliver (Exp. Date April 30, 2010)
- TSCA Permit: PCB Transformer Storage Shed (Exp. Date None)
- Air Permit (Exp. Date August 14, 2008)

Program Progress:

IRP: All 7 IRP sites that are still receiving funding are in the RA(O) or LTM phase.

MMRP: Construction of a fence was completed in FY04-05 for FSTW-008-R-01. No work has been completed at the remaining 7 MMRP sites. Ft Stewart is scheduled for a MMRP SI in FY06.

BRAC: There are no BRAC sites at Ft Stewart.

FORT STEWART

Installation Restoration Program



Total AEDB-R IRP Sites/AEDB-R Sites with Response Complete: 84/77

Different Site Types:

1 Burn Area 2 Fire/Crash Training Areas 1 Contaminated Groundwater

1 Surface Disposal Area 3 Landfills 1 Oil Water Separator

1 Pesticide Shop 5 Explosive Ordnance Disposal Areas

1 Surface Impoundment/ Lagoon 2 Washracks

4 Above Ground Storage Tanks 1 Contaminated Building

56 Underground Storage Tanks 4 Storage Areas

1 Waste Treatment Plant

Most Widespread Contaminants of Concern: Metals, VOCs, SVOCs, TPH, Explosive Residues

Media of Concern: Soil, Groundwater, Surface Water, Sediment

Completed Removal (REM)/Interim Remedial Action (IRA)/Remedial Action (RA):

- 86 UST removals at FST-025 (Total Construction Cost: \$1,500,000)
- Soil removal at FST-026 (Total Construction Cost: \$215,000)
- Removal of 3,000cy of contaminated soil at FST-013, WAAF Fire Training Area (Total Construction Cost: \$520,000)
- GW Pilot Study (Hydrogen Peroxide Injection) WAAF, Bulk Fuel System (FST-035) (Total Project Cost: \$130,000)
- Removal of 1770 cubic yards of contaminated soil at FST-031, DPW Asphalt Tanks (Total

Construction Cost: \$65,000)

Total IRP Funding:

Prior years (up to FY05):	\$ 20,498K
Current year funding (FY06):	\$ 1,017K
Future Requirements (FY07+):	\$ 5,738K
Total:	\$ 27.253K

Duration of IRP:

Year of IRP Inception: 1980 Year of IRP RIP/RC: 2047

Year of IRP Completion including Long Term Management (LTM): 2047

IRP Contamination Assessment

The ER,A program at Fort Stewart focuses on investigation and remediation of eligible sites where contamination occurred due to past practices and activities conducted at the airfield. Currently, the Installation has identified 84 AEDB-R sites to include in the Installation Action Plan. Two of the AEDB-R sites FST-001 and FST-011 are in the LTM phase; FST-002, 003, 004, 009, 014, 017, 019, 25A1, 25A2, 031 and fifty-two of the eighty-six UST sites were ER, A eligible and are considered to be Response Complete due to the fact that no further investigation is required. Six of the AEDB-R sites (FST-020, 022, 023, 028, 031, and 033) are also response complete due to the fact that further investigation is not required but they were not considered eligible for E,RA funding. Another six AEDB-R sites (FST-012, 018, 027, 029, 032, and 034) are response complete under the ER,A program due to the fact that they are currently active sites and are not eligible for ER,A funding. Thus, seven (FST-001, 011, 013, 024, 25A3, 026, and 035) of the 84 identified AEDB-R sites are ER,A sites and they are at various stages of investigation or remediation. An additional seven restoration sites (SWMU 5, 6, 7, 15, 16, 21, and 38) are not in AEDB-R and have received a NFA from GEPD (August 14, 1997) Subpart B Permit or subsequent modifications). These sites are also presented in this report. An inventory of Closed, Transferred, and Transferring (CTT) Ranges was conducted in FY03. This inventory identified seven Military Munitions Rules Sites (FTSW-001-R-01, 002-R-01, 003-R-01, 004-R-01, 005-R-01, 006-R-01, 007-R-01 and 008-R-01).

The majority of the sites that will actually require remediation (i.e., FST-25A3, 026 and 035) are primarily contaminated with petroleum hydrocarbons due to operations of motorpool fueling systems (i.e., storage, product delivery lines, and other components) that were required to support unit activities. In addition, fuel tanker purging operations during Desert Storm (FST-026) and fire training activities prior to 1992 (FST-013) also resulted in extensive petroleum hydrocarbon contamination. The primary contaminants of concern at these sites are BTEX and PAHs, with a limited number also containing free phase product (i.e., LNAPL). To date, chlorinated solvent contamination has not been identified at Fort Stewart.

Beginning in FY97, Fort Stewart consolidated and therefore reduced the number of AEDB-R sites by combining former UST sites that were in the same stage of investigation. Thus, in FY97 the following AEDB-R sites were regrouped as indicated:

<u>FST-25A1:</u> FST-025A (Tank 1), E (Tank 20), H (Tank 28A), M (Tank 61), O (Tank 70), U (Tank 89), Y (Tank 100), AB (Tank 4A), DA (Tank 18), HB (Tank 29), NA (Tank 67), RA (Tank 82), UA (Tank 92), WA (Tank 94A), ZE (Tank 210), ZS (Tank 232), ZT (Tank 236)

<u>FST-25A2:</u> FST-25I (Tank 38), P (Tank 71A), R (Tank 79), X (Tank 94B), Z (Tank 100B), HA (Tank 28B), KB (Tank 56), MA (Tank 64), OA (Tank 71), ZC (Tank 207), ZF (Tank 214), ZG (Tank 215), ZN (Tank 225), ZW (Tank 242), ZY (Tank 244), ZZ (Tank 261)

FST-25A3: Tank # 2, 3, 11, 12, 15, 16, 30-37, 43, 44, 48, 49, 54, 55, 63, 68, 69, 72, 73, 77, 78, 80, 81, 87, 88, 90, 91, 95-97, 200, 201, 202-204, 205, 206, 208, 209, 222, 223, 226, 227, 234, 235, 239, 240, 248, 249, 255-261, NGTC 4, 5, 6, 7, 16.

IRP Contamination Assessment

In FY00, the non-response complete sites in FST-25A1 and FST-25A2 were consolidated with the non-response complete sites in FST-25A3. This enabled FST-25A1 and FST-25A2 to be entered as response complete (Fall FY00), and currently FST-25A3 consists of 36 former USTs.

IRP Cleanup Exit Strategy:

There are seven (7) sites that are currently in IRP. Three sites FST-001, FST-011 and FST-024 are in the LTM phase. FST-001 has three sites associated with it, in 2003 FST-002 and FST-003 were combined with FST-001 in AEDB-R these sites are landfills and in accordance with approved CAPs from GA EPD site inspections are to take place annually along with submittal of annual reports until 2032. FST-011 has four sites associated with it, as with FST-001 in 2003 FST-008, 009, and 010 were combined with FST-011 in AEDB-R these sites are inactive EOD areas and in accordance with approved CAPs from GA EPD site inspections are to take place annually along with annual reports until 2032. FST-024 a no further action is being requested and bi-annual groundwater monitoring is expected to be discontinued FY07. Four (4) sites are in the operations and maintenance phase FST-013 additional delineation is needed along with annual groundwater monitoring until FY09, FST-026 monitoring of natural attenuation, FST-25A3 has 12 USTs remaining that need remediation. UST257-261semi-annual confirmatory sampling of ten monitoring wells. USTs 255/256 semi-annual confirmatory sampling of three monitoring wells. Measurable free product was observed at four USTs 61, 82, 208/209, and 210. Excavation is planned in order to remove the free product. FST-035 further remediation efforts are necessary in order to address soil contamination.

1985

- Environmental Science and Engineering (ESE); Installation Assessment of Headquarters, 24th Infantry Division Report No. 334.; June
- ESE: Fort Stewart Military Reservation RCRA Studies: Final Engineering Report.:
 June
- Georgia Department of Natural Resources (GDNR); RCRA Facility Assessment, Environmental Priorities Initiative, Preliminary Assessment: June
- Georgia Environmental Protection Division (GEPD): Site Characterization Review-Review of Report No. 37-26-1382-88 Pertaining to SWMUs Present: June
- U.S. Army Environmental Hygiene Agency (USAEHA): Environmental Program Review No. 32-24-37038-89, 24th Infantry Division (Mechanized): June
- USAEHA: Interim Final Report, Hazardous Waste Consultation No. 37-26-1382-88, Evaluation of Solid Waste Management Units: June
- USAEHA: Hazardous Waste Special Study No. 37-26-0127-88, Investigation of Soil Contamination: June
- USAEHA: Wastewater Quality Engineering Consultation No. 32-62-0130-86, Disposal of Oily Sludge: June

1990

GEPD: Amendment to Fort Stewart RCRA Permit No. HW-045 (S&T).: June

1991

 Advanced Science, Inc. (ASI): U.S. Army Fort Stewart/Hunter Army Airfield Waste Analysis Plan.: April

1992

ASI: Preliminary Site Inspection Report for Fort Stewart Military Reservation.: July

1993

 Anderson Columbia Environmental, Inc.: Field Report, Delivery Order #30, for Underground Storage Tank Removal: May

- RUST Environmental & Infrastructure: Prefinal RFI Workplan, SWMU FST013, Fire Training Pit, Wright Army Airfield: January
- ESE: Contamination Evaluation/Closure Plan for Fort Stewart Fire Training Areas:
 June
- Geraghty & Miller (G&M): RCRA Facility Investigation Work Plan: June
- Anderson Columbia Environmental, Inc: Closure Report for Tanks 2 & 3: June
- Anderson Columbia Environmental, Inc: Closure Report for Tank 4: June
- Anderson Columbia Environmental, Inc: Closure Report for Tanks 5 & 6: June
- Anderson Columbia Environmental, Inc: Closure Report for Tank 4A: June
- Anderson Columbia Environmental, Inc: Closure Report for Tank 22: June

1995 (Cont'd)

- Anderson Columbia Environmental, Inc: Closure Report for Tank 24: June
- Anderson Columbia Environmental, Inc: Closure Report for Tank 28B: June
- Anderson Columbia Environmental, Inc: Closure Report for Tank 38: June
- Anderson Columbia Environmental, Inc: Closure Report for Tank 41: June
- Anderson Columbia Environmental, Inc: Closure Report for Tank 45: June
- Anderson Columbia Environmental, Inc: Closure Report for Tank 56: June
- Anderson Columbia Environmental, Inc: Closure Report for Tank 65 & 66: June
- Anderson Columbia Environmental, Inc: Closure Report for Tank 71: June
- Anderson Columbia Environmental, Inc: Closure Report for Tank 71A: June
- Anderson Columbia Environmental, Inc: Closure Report for Tank 74: June
- Anderson Columbia Environmental, Inc: Closure Report for Tank 79: June
- Anderson Columbia Environmental, Inc: Closure Report for Tank 87 & 88: June
- Anderson Columbia Environmental, Inc: Closure Report for Tank 94: June
- Anderson Columbia Environmental, Inc: Closure Report for Tank 94B: June
- Anderson Columbia Environmental, Inc: Closure Report for Tank 94C: June
- Anderson Columbia Environmental, Inc: Closure Report for Tank 100A: June
- Anderson Columbia Environmental, Inc: Closure Report for Tank 100B: June
- Anderson Columbia Environmental, Inc: Closure Report for Tank 111: June
- Anderson Columbia Environmental, Inc: Closure Report for Tank 114: June
- Anderson Columbia Environmental, Inc: Closure Report for Tank 115: June
- Anderson Columbia Environmental, Inc: Closure Report for Tank 118: June
- Anderson Columbia Environmental, Inc: Closure Report for Tank 122: June
- Anderson Columbia Environmental, Inc: Closure Report for Tank 201A: June
- Anderson Columbia Environmental, Inc: Closure Report for Tank 201B: June
- Anderson Columbia Environmental, Inc: Closure Report for Tank 207: June
- Anderson Columbia Environmental, Inc: Closure Report for Tank 207A: June
- Anderson Columbia Environmental, Inc: Closure Report for Tank 214: June
- Anderson Columbia Environmental, Inc: Closure Report for Tank 215: June
- Anderson Columbia Environmental, Inc: Closure Report for Tank 216: June
- Anderson Columbia Environmental, Inc: Closure Report for Tank 224: June
- Anderson Columbia Environmental, Inc: Closure Report for Tank 225: June
- Anderson Columbia Environmental, Inc: Closure Report for Tank 238: June
- Anderson Columbia Environmental, Inc: Closure Report for Tank 241: June
- Anderson Columbia Environmental, Inc: Closure Report for Tank 242: June
- Anderson Columbia Environmental, Inc: Closure Report for Tank 243: June
- Anderson Columbia Environmental, Inc: Closure Report for Tank 244: June
- Anderson Columbia Environmental, Inc: Field Report, Delivery Order #75, for Underground Storage Tank Removal: August
- RUST Environmental & Infrastructure: 100% specifications for Interim Measures, SWMU FST-013, Fire Training Pit, Wright Army Airfield: August

1996

- Anderson Columbia Environmental, Inc: Field Report, Delivery Order #84, for Underground Storage Tank Removal: November
- RUST Environmental & Infrastructure: Corrected Final Phase I RCRA Facility Investigation Report for 24 Solid Waste Management Units: May
- Metcalf and Eddy: Final Phase I RFI Report for Bulk Fuel Storage System at Wright Army Airfield: December

- Science Applications International Corporation (SAIC): Corrective Action Plan-Part A for Tanks #205 and #206: March
- SAIC: Corrective Action Plan-Part A for Tank #11 & 12: March
- SAIC: Corrective Action Plan-Part A for Tank #14: March
- SAIC: Corrective Action Plan-Part A for Tank #18, 20 & 28A: March
- SAIC: Corrective Action Plan-Part A for Tank #30, 31, 32, 33, 34 & 35: March
- SAIC: Corrective Action Plan-Part A for Tank #61: March
- SAIC: Corrective Action Plan-Part A for Tank #67: March
- SAIC: Corrective Action Plan-Part A for Tank #68 & 69: March
- SAIC: Corrective Action Plan-Part A for Tank #72 & 73: March
- SAIC: Corrective Action Plan-Part A for Tank #90 & 91: March
- SAIC: Corrective Action Plan-Part A for Tank #92: March
- SAIC: Corrective Action Plan-Part A for Tank #94A: March
- SAIC: Corrective Action Plan-Part A for Tank #95, 96 & 97: March
- SAIC: Corrective Action Plan-Part A for Tank #98 & 99: March
- SAIC: Corrective Action Plan-Part A for Tank #208 & 209: March
- SAIC: Corrective Action Plan-Part A for Tank #234 & 235: March
- SAIC: Corrective Action Plan-Part A for Tank #239 & 240: March
- SAIC: Corrective Action Plan-Part A for Tank #1: April
- SAIC: Revised Final Sampling and Analysis Plan for 724th Tanker Purging Station, SWMU 26: May
- SAIC: Revised Final Sampling and Analysis Plan for Burn Pits, SWMUs 4A-4F: May
- SAIC: Final Sampling and Analysis Plan for South Central Landfill (FST-01): May
- SAIC: Corrective Action Plan-Part A for Tanks #70: May
- SAIC: Corrective Action Plan-Part A for Tanks #77 & 78: May
- SAIC: Corrective Action Plan-Part A for Tanks #82: May
- SAIC: Corrective Action Plan-Part A for Tanks #89: May
- SAIC: Corrective Action Plan-Part A for Tanks #100: May
- SAIC: Corrective Action Plan-Part A for Tanks #210: May
- SAIC: Corrective Action Plan-Part A for Tanks #222 & 223: May
- SAIC: Corrective Action Plan-Part A for Tanks #236 & 237: May
- Fort Stewart Environmental Branch: Closure Report for Tank 7: July
- Fort Stewart Environmental Branch: Closure Report for Tank 13: July
- Fort Stewart Environmental Branch: Closure Report for Tank 17, 19, 21 & 23: July
- Fort Stewart Environmental Branch: Closure Report for Tank 36 & 37: July
- Fort Stewart Environmental Branch: Closure Report for Tank 42: July

1997 (Con't)

- Fort Stewart Environmental Branch: Closure Report for Tank 50: July
- Fort Stewart Environmental Branch: Closure Report for Tank 51: July
- Fort Stewart Environmental Branch: Closure Report for Tank 52: July
- Fort Stewart Environmental Branch: Closure Report for Tank 76: July
- Fort Stewart Environmental Branch: Closure Report for Tank 220 & 221: July
- Fort Stewart Environmental Branch: Closure Report for Tank 228, 229, 230 & 231: July
- SAIC: Revised Final Sampling and Analysis Plan for Phase II RFIs of 16 SWMUs: October
- SAIC: Addendum to the Revised Final Sampling and Analysis Plan for Phase II RFIs of 16 SWMUs: October

- SAIC: Corrective Action Plan-Part B for Tanks #90 and #91: February
- Cape Environmental: Pre-Final Interim Measures Report, Fire Training Pit Site (SWMU FST-013): March
- SAIC: Corrective Action Plan-Part B for Tanks #208 and #209: April
- SAIC: Corrective Action Plan-Part B for Tanks #77 & 78: July
- SAIC: Corrective Action Plan-Part B for Tanks #95-97: July
- SAIC: Corrective Action Plan-Part A Addendum for Tank #11 & 12: July
- SAIC: Corrective Action Plan -Part A Addendum for Tanks #15 & 16: July
- SAIC: Corrective Action Plan-Part A Addendum for Tank #61: July
- SAIC: Corrective Action Plan-Part A Addendum for Tank #67: July
- SAIC: Corrective Action Plan-Part A Addendum for Tank #68 & 69: July
- SAIC: Corrective Action Plan-Part A Addendum for Tank #72 & 73: July
- SAIC: Corrective Action Plan-Part A Addendum for Tank #80 & 81: July
- SAIC: Corrective Action Plan-Part A Addendum for Tank #92: July
- SAIC: Corrective Action Plan-Part A Addendum for Tank #94A: July
- SAIC: Corrective Action Plan-Part A Addendum for Tank #205 & 206: July
- SAIC: Corrective Action Plan-Part A Addendum for Tank #210: July
- SAIC: Corrective Action Plan-Part A Addendum for Tank #222 & 223: July
- SAIC: Corrective Action Plan-Part A Addendum for Tank #232 & 233: July
- SAIC: Corrective Action Plan-Part A Addendum for Tank #234 & 235: July
- SAIC: Corrective Action Plan-Part A Addendum for Tank #236 & 237: July
- RUST Environmental: Revised Final Phase II RFI Workplan for SWMU 13: Fire Training Area at Wright Army Airfield: August
- SAIC: Corrective Action Plan-Part A Addendum for Tank #1: August
- SAIC: Corrective Action Plan-Part B for Tank #70: August
- SAIC: Corrective Action Plan-Part B for Tanks #226 and #227: August
- Montemayor: UST upgrade Report for UST #62 (DPW Yard): September
- Montemayor: UST upgrade Report for USTs #262 and #263 (Bryan Village Shoppette): September
- SAIC: Revised Final Sampling and Analysis Plan for Phase II RFI at Wright Army Airfield Bulk Fuel System (SWMU 35): October

1998 (Con't)

- SAIC: Corrective Action Plan-Part B for Tanks #30, #31, #32, #33, #34 and #35:
 October
- SAIC: Revised Final Phase II RFI Report for Former Tanker Purge Facility (SWMU 26): November
- EarthTech: Closure Report for UST #280: December
- EarthTech: Closure Report for UST #281: December
- SAIC: Corrective Action Plan-Part A for USTs #48 & 49: December
- SAIC: Corrective Action Plan-Part A for USTs #54 & 55: December
- SAIC: Corrective Action Plan-Part A for USTs #56: December
- SAIC: Corrective Action Plan-Part A for USTs #71A: December

- SAIC: Closure Report for UST #7A: February
- SAIC: Revised Final Phase II RFI Report for Burn Pits (SWMUs 4A-4F): February
- SAIC: Final Phase II RFI Report for 16 SWMUs: February
- SAIC: Corrective Action Plan-Part A for USTs #29: March
- SAIC: Corrective Action Plan-Part A for USTs #82: March
- SAIC: Corrective Action Plan-Part A for USTs #89: March
- SAIC: Corrective Action Plan-Part A for USTs #255 & 256: March
- SAIC: Corrective Action Plan-Part A for USTs #257 & 260: March
- SAIC: Corrective Action Plan-Part A for USTs #260: March
- SAIC: Revised Final Phase II RFI Report for South Central Landfill (SWMU 1): March
- SAIC: Closure Report for UST #28C: March
- SAIC: Corrective Action Plan-Part A for UST #111: April
- SAIC: Corrective Action Plan-Part A for UST #118: April
- SAIC: First Annual Monitoring Only Report for USTs #11 & 12: April
- SAIC: First Annual Monitoring Only Report for USTs #90 & 91: April
- SAIC: First Annual Monitoring Only Report for USTs #95-97: April
- SAIC: Closure Report for UST #282: April
- SAIC: First Annual Monitoring Only Report for USTs #30 #35: May
- SAIC: First Annual Monitoring Only Report for USTs #208 & 209: May
- Hussey, Gay, Bell, and DeYoung: Closure Report for UST #104: June
- Hussey, Gay, Bell, and DeYoung: Closure Report for UST #107: June
- Hussey, Gay, Bell, and DeYoung: Closure Report for UST #108: June
- Hussey, Gay, Bell, and DeYoung: Closure Report for UST #109: June
- Hussey, Gay, Bell, and DeYoung: Closure Report for UST #110: June
- Hussey, Gay, Bell, and DeYoung: Closure Report for UST #112: June
- Hussey, Gay, Bell, and DeYoung: Closure Report for UST #113: June
- Hussey, Gay, Bell, and DeYoung: Closure Report for UST #120: June
- Hussey, Gay, Bell, and DeYoung: Closure Report for UST #121: June
- Hussey, Gay, Bell, and DeYoung: Closure Report for UST #124: June
- Hussey, Gay, Bell, and DeYoung: Closure Report for UST #247: June
- Hussey, Gay, Bell, and DeYoung: Closure Report for UST #251: June

1999 (Cont'd)

- Hussey, Gay, Bell, and DeYoung: Closure Report for UST #252: June
- Hussey, Gay, Bell, and DeYoung: Closure Report for UST #253: June
- Hussey, Gay, Bell, and DeYoung: Closure Report for UST #254: June
- SAIC: Corrective Action Plan-Part A for USTs #5 and #6: June
- SAIC: Corrective Action Plan-Part A for UST #94: June
- SAIC: Corrective Action Plan-Part A for USTs #36 and #37 June
- EarthTech: Final First Semi-Annual Detection Monitoring Report for the OB and OD Units: July
- Fort Stewart Environmental Branch: Closure Report for UST #106: July
- Fort Stewart Environmental Branch: Closure Report for UST #215: July
- Fort Stewart Environmental Branch: Closure Report for UST #16 (NGTC): July
- SAIC: Final Phase II RFI WAAF Bulk Fuel Facility -SWMU 35: July
- SAIC: Revised Final Calendar Year 1998 Detection Monitoring Report for the OB and OD Units: July
- SAIC: Revised Final Calendar Year 1998 False Positive Report for the OB and OD Units: July
- SAIC: Final Corrective Action Plan for the former Tanker Purging Facility (SWMU 26): July
- SAIC: Corrective Action Plan-Part A for UST #71: July
- SAIC: Corrective Action Plan-Part A for USTs #2 & 3: August
- SAIC: Corrective Action Plan-Part A for UST #28B: August
- SAIC: Corrective Action Plan-Part A for UST #38: August
- SAIC: Corrective Action Plan-Part A for UST #63 & 64: August
- SAIC: Corrective Action Plan-Part A for UST #122: August
- SAIC: Corrective Action Plan-Part A for UST #123: August
- SAIC: Corrective Action Plan-Part A for UST #214: August
- SAIC: Corrective Action Plan-Part A for UST #225: August
- SAIC: Corrective Action Plan-Part A for UST #242 & 244: August
- SAIC: Corrective Action Plan-Part A for UST #248 & 249: August
- SAIC: Corrective Action Plan-Part A for USTs #4 & 5 (NGTC): August
- SAIC: Corrective Action Plan-Part A for USTs #6 & 7 (NGTC): August
- RUST Environmental/EarthTech: Final RFI for WAAF Fire Training Area (SWMU 13): September
- SAIC: Corrective Action Plan-Part A for USTs #79: October
- SAIC: Corrective Action Plan-Part A for USTs #87 & 88: October
- SAIC: Corrective Action Plan-Part A for USTs #100B: October
- SAIC: Corrective Action Plan -Part B Addendum #2 for USTs 11 & 12: October
- SAIC: First Annual Monitoring Only Report for UST #29: October
- SAIC: First Annual Monitoring Only Report for USTs #77 & 78: October
- SAIC: First Annual Monitoring Only Report for USTs #82: October
- SAIC: First Annual Monitoring Only Report for USTs #89: October
- SAIC: First Annual Monitoring Only Report for USTs #226 & 227: October
- SAIC: Final Corrective Action Plan for the South Central Landfill (SWMU 1): December

2000

- SAIC: Corrective Action Plan-Part B for USTs #48 and #49: January
- SAIC: Corrective Action Plan-Part B for USTs #257-261: January
- SAIC: Corrective Action Plan-Part B for USTs #255 and #256: February
- SAIC: Second Annual Monitoring Only Report for USTs #11 & 12: April
- SAIC: Second Annual Monitoring Only Report for USTs #90 & 91: April
- SAIC: Second Annual Monitoring Only Report for USTs #95 #97: April
- SAIC: Second Annual Monitoring Only Report for USTs #30 #35: May
- SAIC: Second Annual Monitoring Only Report for USTs #208 & 209: May
- SAIC: First Progress Report for Enhanced Bioremediation of the Tanker Purging Station (FST-026): June
- SAIC: Corrective Action Plan-Part A Addendum for UST #94A: June
- Fort Stewart Environmental Branch: Closure Report for UST #101: July
- SAIC: Corrective Action Plan-Part A Addendum #2 for UST #210: July
- SAIC: Corrective Action Plan-Part A Addendum #2 for UST #236: July
- SAIC: Corrective Action Plan-Part B for USTs #15 and #16: August
- SAIC: Corrective Action Plan-Part B for UST #100B: September
- SAIC: Corrective Action Plan-Part B for USTs #36 and #37: September
- SAIC: Corrective Action Plan- Part A for UST #93: September
- SAIC: Second Annual Monitoring Only Report for UST #29: October
- SAIC: Second Annual Monitoring Only Report for UST #77 & 78: October
- SAIC: Second Annual Monitoring Only Report for UST #82: October
- SAIC: Second Annual Monitoring Only Report for UST #89: October
- SAIC: First Annual Monitoring Only Report for UST #1: November
- SAIC: First Annual Monitoring Only Report for USTs #2 and #3: November
- SAIC: First Annual Monitoring Only Report for USTs #255 & 256: November
- SAIC: Corrective Action Plan-Part B for USTs #5 and #6: November
- SAIC: First Annual Monitoring Only Report for UST #122: December
- SAIC: First Annual Monitoring Only Report for UST #28B: December
- SAIC: First Annual Monitoring Only Report for UST #38: December

- SAIC: Final CAP for Evans Army Heliport Bulk Fuel (SWMU 29) (OMA): January
- SAIC: Third Progress Report for Enhanced Bioremediation of the Tanker Purging Station (FST-026): January
- SAIC: First Semi-Annual Progress Report for USTs 11 and 12: January
- SAIC: Revised Final Addendum for SWMU 27H (OMA): March
- SAIC: Final CAP for SWMU 2 (Camp Oliver Landfill): March
- SAIC: Final CAP for SWMU 3 (TAC-X Landfill): March
- SAIC: First Semi-Annual Monitoring Only Report for USTs 5 and 6: March
- SAIC: First Semi-Annual Monitoring Only Report for USTs 15 & 16: March
- SAIC: CAP-Part B Addendum #2 for USTs 202-204: March
- SAIC: First Annual Monitoring Only Report for UST 94: April
- SAIC: First Annual Monitoring Only Report for UST 210: April
- SAIC: First Annual Monitoring Only Report for UST 61: May

2001 (Cont'd)

- SAIC: First Annual Monitoring Only Report for UST 100B: May
- SAIC: Final CAP for SWMUs 8, 9 and 11: May
- SAIC: Fourth Progress Report for Enhanced Bioremediation of the Tanker Purging Station (FST-026): June
- SAIC: Revised Final Addendum for SWMU 27F (OMA): June
- SAIC: Revised Final Addendum for SWMU 24B: June
- SAIC: Final Compliance Monitoring Report for CY01 for the IWTP (SWMU 18) (OMA): June
- SAIC: Revised Final CAP for SWMU 29 (OMA): June
- SAIC: CAP for Inactive EOD Area North of the Garrison Area (SWMU 10): July
- SAIC: Second Semi-Annual Progress Report for USTs 11 and 12: July
- SAIC: CAP for the Active EOD Area (SWMU 12A/12B/12C) (OMA): August
- SAIC: CAP for the Industrial Wastewater Treatment Plant (SWMU 18) (OMA): August
- SAIC: CAP Part B for USTs 276-279 (Victory Shoppette): August
- CAP B Tank 276-279: August
- Earth Tech: CAP-Progress TAX-X Landfill (SWMU 3): September
- EarthTech: CAP-Progress Camp Oliver Landfill (SWMU 2): September
- 3rd Semiannual MO Tank 94A: September
- Earth Tech: CAP-Sampling Evans Army Heliport POL Storage Facility (SWMU 29): October
- 2nd Annual MO Tank 255-256: November
- 1st Annual MO Tank 15-16: November
- Addendum #13 to the Work Plan Tank 257-261: December
- Annual Detection Monitoring Only Report for CY 2001 SWMU 12B & 12C: December
- CAP Progress Report for CY 2001 SWMU 1: December

- Earth Tech: Site Health & Safety Plan, Investigation at UST & Heating Oil Sites at Bldgs #1720, #1283, #1284, #1285, #1286: January
- Earth Tech: Addendum #3 Work Plan for Preliminary Groundwater & CAP PartA/Part B Investigations at UST Sites & Heating Oil Tank Sites at Bldgs #1720, 1283, 1284, 1285, 1286: January
- 3rd Semiannual Progress Report Tank 11-12: January
- Earth Tech: Closure Report, DPW Facility Bldg 1135 Gasoline UST #62: March
- Earth Tech: Master Field Report for Non-Regulated UST and Former Heating Oil Tanks at Site: Group I Bldg 1828, Group II Bldg 1720, Group III Bldg 1510, Group IV Bldg 1160, Group V Bldg 1283, 1284, 1285, 1286: April
- Earth Tech: Closure Report, Holbrook Pond, Bldg T-8340 Heating Oil Tank: April
- Earth Tech: IRA, Former Fire Training Area at WAAF (SWMU 13): April
- 2nd Annual MO Tank 94A: April
- Earth Tech: Final Interim Removal Action Report Former Fire Training Area at Wright Army Airfield: April

2002 (Cont'd)

- 1st Annual MO Tank 202-204: May
- 2nd Annual MO Tank 122: May
- Addendum #14 to the Work Plan: May
- Earth Tech: Tank Secondary Containment Plans & Specifications: June
- Earth Tech: Washrack Canopies Curb and Trench Details: June
- 3rd Annual MO Tank 89: June
- Sampling & Analysis Plan Tank 257-261: June
- Corrective Action Plan SWMU 24B: June
- Corrective Action Plan SWMU 27F: June
- Corrective Action Plan SWMU 35: June
- SAIC: CAP for SWMU 27F: June
- SAIC: CAP Progress Report for CY 02 For SWMU 35: June
- Earth Tech: CAP-Progress, Inactive EOD Area Located ~3 Miles Northeast of Garrison Area (SWMU 11): July
- Earth Tech: CAP-Progress, Inactive EOD Area Located ~9 Miles Northeast of Garrison Area (SWMU 8): July
- 4th Semiannual Progress Report Tank 11-12: July
- Earth Tech: CAP Progress Report for SWMU 8 for CY 02: July
- SAIC: 3rd Annual Progress Report for UST 89: July
- Earth Tech: CAP Progress Report for SWMU 11 for CY 02: August
- SAIC: Corrective Action Plan For SWMU 24B: August
- SAIC: 4th Semi Annual Progress Report for USTs 11 &12: August
- SAIC Corrective Action Plan for Fire Training Area at Wright Army Airfield (SWMU 13): September
- SAIC: 7th Corrective Action Progress Report for the Enhanced Bioremediation (PHOSter II) at the Former Tanker Purging Station SWMU 26: September
- SAIC: 5th semi annual progress report for UST 94A: October
- SAIC: 3rd Annual Monitoring Only Report for USTs 255 & 256: November
- SAIC: CAP Progress Report for SWMU 1,2, and 3 for CY 02: December

2003

- SAIC: Corrective Action Plan Progress Report For CY 2002 For the Industrial Waste Water Treatment Plant (SWMU 18): January
- SAIC: 5th semi annual progress report for USTs 11 & 12: January
- SAIC: 5th semi annual progress report for UST 89: January
- SAIC: 3rd Annual Progress Report for UST 94A: April
- SAIC: 4th semi Annual Progress Report for UST 122: May
- SAIC: 3rd Semi annual progress report for USTs 15 & 16: June
- SAIC: 4th Annual Progress Report for UST 89: July
- SAIC: 6th semi annual progress report for USTs 11 & 12: Augus

2004

 SAIC: Soil Sampling Report for Building # 1056 SWMU 24 B Old Radiator Shop / Paint Booth: September

2004 (Con't)

- SAIC: Corrective Action Plan Progress Report For CY 2003 SWMU 24 B Old Radiator Shop / Paint Booth: September
- STEP: Work Plan for Interim Removal Activities at UST 89 and 94 A: September
- SAIC: Corrective Action Plan Progress Report For CY 2003 SWMUs 8,9,10, & 11: October
- SAIC: 9th Corrective Action Plan Progress Report for Enhanced Bioremediation (PHOSter II) At The Former 724th Tanker Purging Station SWMU 26.

- SAIC: Revised Final Corrective Action Plan Progress Report for CY 2002 for SWMUs 1,2, and 3: January
- STEP: Final Report for Interim Removal Activities at UST 89 and UST 94A: February
- SAIC: Corrective Action Plan Progress Report for CY 2004 for the Wright Army Airfield Bulk Fuel System SWMU 35: March
- SAIC: Corrective Action Plan Progress Report For CY 2004 for the Former Fire Training Area at Wright Army Airfield SWMU 13: May
- STEP: Final Site Construction Report for Interim Remedial Action at Military Munitions Rule Program Site FTSW-008-R-01, Hero Road AOC: May
- SAIC: Revised Final Corrective Action Plan Progress Report For CY 2004 Wright Army Airfield Bulk Fuel System SWMU 35: May
- SAIC: Fifth Annual Monitoring Only Report UST 94A: June
- SAIC: Fifth Annual Monitoring Only Report UST 89: June
- SAIC: Ninth Semiannual Progress Report USTs 11/12: June
- SAIC: Addendum #4 To The Sampling and Analysis Plan For Phase II RCRA Investigations at the Former 724th Tanker Purging Station SWMU 26: August
- SAIC: Corrective Action Plan Progress Report for CY 2005 for SWMU 24 B, Old Radiator Shop / Paint Booth: September
- SAIC: Sixth Annual Monitoring Only Report USTs 255&256, Building 16012: November

FORT STEWART

Installation Restoration Program
Site Descriptions

FST-001 (PAGE 1 OF 2) POST SOUTH CENTRAL LANDFILL (SWMU 1)

SITE DESCRIPTION

The Post South Central Landfill (FST-001) is located northwest of Fort Stewart's main cantonment area. This 141-acre site is situated on a point of land bounded on three sides (north, south, and west) by Mill Creek, a tributary to Taylor's Creek. The site consists of two active permitted landfills, which are not being investigated, and a number of old inactive cells which were used throughout the last fifty years and are being investigated under the ER,A program. The old inactive section located on the eastern side of the area of concern, which is separated from the active landfills by a large drainage canal, was used from 1942-1952. The inactive cells located on the western side of the area of concern, which were used from 1945-

STATUS

REGULATORY DRIVER: RCRA

RRSE: High

CONTAMINANTS OF CONCERN:

Metals, VOCs, SVOCs, Pesticides,

PCBs

MEDIA OF CONCERN:

Soil, Surface Water

PHASES	Start	<u>Ena</u>
RFA	198702	198711
CS	198902	198912
RFI	199401	200006
CMI(C)	200008	200010
LTM	200109	203209

RC: 200010

1973, were investigated during the Phase I RFI. The only distinction between the active landfills and the western inactive cells is that the groundwater flows in opposite directions.

The two active landfills are permitted by the State of Georgia, and groundwater monitoring is conducted on a semiannual basis. Continued monitoring of the active cells under the Installation's Subpart D Permit (OMA). Methane has been detected in methane probes adjacent to the inactive section located on the eastern side of the active landfill in the explosive range. In accordance with GA EPD requirements methane wells were installed in FY98 and are sampled quarterly, funded with non-ER,A sources.

A Phase II RFI was conducted for SWMU 1 during 1st QTR FY98 and the Revised Final Phase II RFI report recommended no further action for the old, inactive portion of the landfill as long as restricted use of the groundwater was maintained and controlled through (institutional controls). A CAP was prepared for the old, inactive portion of SWMU 1 to evaluate various levels of institutional controls, administered through the BMP and approved by GA EPD, In accordance with the approved CAP fifty-four site identification signs were installed at SWMU 1 in 1st QTR FY01. Eleven wells were abandoned and the Installation Master Plan was modified to incorporate institutional controls for this site. Well abandonment confirmation was conducted in FY02 and placed in the 2003 Annual Progress Report. Subsequent Annual Progress Reports are being performed in-house.

Sites FST-002 and 003 were combined with FST-001 in the third quarter of 2003. FST-002 "The Camp Oliver Landfill (SWMU 2)" is located approximately 17 miles northeast of the FSMR garrison area along the Fort Stewart Road 129. From 1960s to 1979, the area was used for disposal of refuse from troop training activities and nearby residents by openpit burning. FST-003 "TAC-X Landfill (SWMU 3)" is located approximately 3.5 miles south-southwest of Pembroke Georgia and less one mile southeast of Dean Field and the

FST-001 (PAGE 2 OF 2) POST SOUTH CENTRAL LANDFILL (SWMU 1)

Noncommissioned Officer's Academy and was active from the 1960s until 1982. Based on findings presented in the revised final Phase II RFI report for 16 SWMUs at FSMR a "no further action required" status was assigned to the investigation of both sites. CAPs were recommended to control the intrusive activities at SWMUs 2 and 3. In accordance with the approved CAPs by GA EPD, fourteen warning signs were installed at SWMU 2; and ten warning signs were installed at SWMU 3. Long term monitoring associated with these sites will be incorporated with FST-001 site inspections and annual reports.

Five-year reviews for sites FST-001, 002, and 003 began in FY05 and is funded separately through the Omaha District Corp of Engineers (COE).

CLEANUP STRATEGY

The Corrective Action Progress Report will be submitted in 3rd QTR of each FY. Site inspections of FST-001, 002 and 003 and submittal of annual progress reports to GA EPD are planned through 2032.

Five-year reviews are planned for FST-001, 002, 003, and will be funded separately through the Omaha District COE with ERA funding.





FST-011 (PAGE 1 of 2) INACTIVE EOD AREA #4 (SWMU 11)

SITE DESCRIPTION

Open detonation of unexploded ordnance took place at Inactive EOD Area #4 (SWMU 11) from 1953 to 1975. The area is located three miles northeast of the cantonment area, about two miles south of Georgia Highway 144, and one mile northeast of Wright Army Airfield. Blast craters cover a 1-acre tract, which is now overgrown with trees and brush. Wastes characterized at the site included excess powder bags, small arms rounds, artillery and mortar rounds, illuminating projectiles, bulk explosives, explosive residues, rocket propellant, high explosive grenades and smoke grenades. A surface sweep was conducted by EOD personnel and surface explosive hazards were removed.

STATUS

REGULATORY DRIVER: RCRA

RRSE: Low

CONTAMINANTS OF CONCERN:

Metals, Explosive Residue **MEDIA OF CONCERN:**

Soil

PHASES	Start	End
RFA	198702	198711
CS	198902	198912
RFI	199401	200107
CMI(C)	200201	200209
LTM	200301	203201

RC: 200209

Phase I RI analyses indicated that concentrations of arsenic, lead and silver were greater than action levels and GA EPD required a Phase II RFI be conducted at this site. Field work for this investigation began 2nd QTR FY98. The data was presented in the Revised Final Phase II RFI report which was submitted to GA EPD in 3rd QTR FY00 and recommended an institutional control CAP and no further monitoring (constituents above screening levels were present and will remain on site). The corrective actions for SWMUs 8, 9, and 11 were identified in the CAP for the Inactive EOD Area Located Approximately Nine Miles Northeast of the Garrison Area (SWMU 8): Inactive EOD Area Located in Red Cloud Range, Hotel Area (SWMU 9); and Inactive EOD Area Located Approximately Three Miles Northeast of Garrison Area (SWMU 11 at FSMR, dated May 2001. The corrective actions for SWMU 10 were identified in the CAP for the Inactive EOD Area North of Garrison Area (SWMU 10) dated July 2001. In accordance with approved CAPs for SWMUs 8, 9, 10, and 11, institutional controls were installed at each SWMU and are enforced through the Base Master Plan (BMP). The following physical items were installed at the SWMUs; SWMU 8 – fencing, two gates, and eight warning signs; SWMU 9 – one warning sign: SWMU 10 - fencing, one gate, and four warning signs around the smaller area of SWMU 10; and SWMU 11 - fencing, one gate, and five warning signs.

The Operations and Maintenance (O&M) Plan contained in each CAP required an annual inspection of each warning sign and fence and gate(s) (if required) around each SWMU. Any damage identified during the inspection requires documentation. Sites FST-008, 009 and 010 were combined with FST-011 as of 3rd QTR 2003.

The first annual Corrective Action Progress Report was submitted to GA EPD in 2004 and included SWMUs 8, 9, and 11. No site inspection of SWMU 10 was performed because

FST-011 (PAGE 2 of 2) INACTIVE EOD AREA #4 (SWMU 11)

signs were not installed until the 2nd QTR FY04. Subsequent annual site inspections and reports will be conducted in-house.

CLEANUP STRATEGY

Conduct required site inspections and submit subsequent annual progress reports to GA EPD through 2032.

The five-year reviews are planned FST-008, 009, 010, and 011, and will be funded separately through the Omaha District COE with ERA funding.

FST-013 (PAGE 1 of 2) FIRE TRAINING AREA AT WAAF (SWMU 13)

SITE DESCRIPTION

Wright Army Airfield (WAAF) is located in Liberty County near the south entrance to Fort Stewart, ~1.5 miles from the community of Hinesville. The Former Fire Training Area (FTA) is located on the northwest periphery of WAAF, ~3,100ft northwest of the control tower, which is in the southern portion of the FSMR. FST-013 was used as a training area for the airfields firefighters prior to 1982 until 1992. The FTA consisted of a 5.000-ft² concrete pad with an integral berm, an oil/water separator (OWS) sump, underground piping, and an aboveground jet propellant (JP-4) fuel storage tank. In 1997 an interim measures investigation conducted to remove and properly dispose of the fire training facilities, which included all structures and appurtenances and soil that exceeded the Preliminary Cleanup Targets established in the project specification.

STATUS

REGULATORY DRIVER: RCRA

RRSE: High

CONTAMINANTS OF CONCERN:

VOCs, SVOCs

MEDIA OF CONCERN:

Soil, Groundwater

<u>PHASES</u>	Start	<u>End</u>
RFA	198702	198711
CS	198902	198912
RFI/CMS	199401	200206
IRA	199706	199712
CMI(C)	200207	200709
CMI(O)	200710	200909

RIP: 200709 RC: 200909

A Resource Conservation and Recovery Act (RCRA) facility investigation (RFI) was conducted at FST-013 in September 1999. The nature and extent of groundwater contamination at this site was determined during the Phase II RFI activities and submitted to GA EPD recommending the development of a CAP in order to address groundwater contamination. The Phase II RFI was approved by GEPD in April 2001. Baseline groundwater sampling conducted in Jan 2001, indicated the dissolved contamination near MW-12 was not decreasing: therefore additional soil sampling was conducted in the vicinity of MW-12 in Dec 2000 and confirmed a small source area remained. In the 1st and 2nd QTR FY02 an interim remedial action (IRA) was conducted to remove a portion of an 8-in.-thick concrete pad, which covered a 20-by8-ft area. The IRA also included the removal of approximately 337 tons of soil and the removal of MW-12.

Remaining soil and groundwater contamination was addressed in the CAP that was submitted to GA EPD for review in 4th QTR FY02. The CAP recommended that no remediation be performed for the surface soil compounds of concern (COCs). The remedial response objective for FST-013 is to reduce the present concentrations of the site COCs in groundwater (benzene, ethylbenzene, 2-methylnaphthalene, and naphthalene) to remedial levels (RLs) presented in the CAP. The Installation Master Plan was modified to incorporate institutional controls for this site. First round annual sampling was conducted in 1st QTR FY03 and included sampling of seven monitoring wells for VOCs, SVOCs and natural attenuation parameters. CAP Progress Report for CY03 was submitted in 1st QTR FY05. CAP Progress Report for CY04 was submitted in the 3rd QTR FY05.

FST-013 (PAGE 2 of 2) FIRE TRAINING AREA AT WAAF (SWMU 13)

Comments on the CAP were received from the GA EPD February 2004. Response to comments were submitted the 1st QTR FY06.

CLEANUP STRATEGY

Delineation along pipeline (funded FY06. Excavating additional soil along the pipeline potentially located below the water table. Installation of three groundwater monitoring wells.

Annual groundwater monitoring of seven shallow monitoring wells will continue until FY09. Groundwater will be sampled utilizing low-flow techniques and analyzed for VOCs, SVOCs, RCRA metals and natural attenuation parameters. The results of the annual groundwater sampling will be submitted annually to GA EPD in a CAP Progress Report until RLs have been achieved. Well abandonment and site closeout.

FST-024 (PAGE 1 of 2) OLD PAINT BOOTH – SWMU 24B, BLDG 1056

SITE DESCRIPTION

FST-024 consists of two subsites; the Radiator Repair Shop (SWMU 24A) and the Old Paint Booth (SWMU 24B).

The Radiator Repair Shop (SWMU 24A) was located inside Building 1070, which burned down in Feb 1993. The shop was in operation from 1980 to 1992. Radiators were repaired by descaling them and soaking them in an aqueous solution of sodium hydroxide. The radiator was then leak tested using a fluorescent dye and painted in a wet curtain spray paint booth located in Building 1056. Based on sampling results, there is no evidence of contamination at this subsite. Therefore, SWMU 24A is response complete and GEPD approved a NFA status.

STATUS

REGULATORY DRIVER: RCRA

RRSE: Low

CONTAMINANTS OF CONCERN:

Metals, VOCs, SVOCs **MEDIA OF CONCERN:**

Soil, Groundwater, Surface Water

PHASES	Start	End
RFA	198702	098711
CS	198902	198912
RFI/CMS	199401	200409
CMI(C)	200306	200409
CMIO)	200310	200610

RIP: 200409 RC: 200610

The Old Paint Booth (SWMU 24B) was located in Building 1056 and was used for painting operations. The facility has not been used for painting operations in over 20 years according to personnel who work in the building.

The field work for the RI was conducted in 2nd QTR FY98. A Phase II RFI was conducted in 1st QTR FY00 and indicated moderate levels (above action levels) of VOCs, SVOCs, and RCRA metals in surface soil, subsurface soil and groundwater. The Phase II RFI Addendum for this site was submitted to GEPD in 4th QTR FY00. Comments were received in April 2001 and a revised Phase II RFI Addendum was submitted to GEPD in July 2001. In accordance with the recommendations of the Phase II RFI, a CAP was developed and submitted in 4th QTR FY02. The selected corrective action alternative for remediation of surface soil was institutional controls and groundwater monitoring. The Installation Master Plan was modified to incorporate institutional controls at this site. The first round of bi-annual groundwater monitoring was conducted 4th QTR FY03, which included six wells for VOCs, SVOCs, and RCRA metals. Recent sampling results indicate that groundwater contamination is below action levels.

In FY04, confirmatory soil samples were collected below the building, the soil results indicated that no additional soil actions are needed. Demolition of building 1056 is scheduled in the 2006/2007 timeframe.

FST-024 (PAGE 2 of 2) OLD PAINT BOOTH – SWMU 24B, BLDG 1056

CLEANUP STRATEGY

An addendum to the CAP recommending specific actions and/or monitoring based on new data (soil or groundwater) coordinated with the final construction and design and schedule of Building 1056 (funded FY06). Bi-annual groundwater monitoring (MNA) is expected to be discontinued pending NFA from GAEPD.

FST-026 (PAGE 1 OF 2) FORMER 724TH TANKER PURGE STN (SWMU 26)

SITE DESCRIPTION

The 724th Tanker Purging Station (SWMU 26) was located on the western portion of the cantonment area near the fuel truck parking lot. The Tanker Purging Station was an area where tanker trailers that carried JP-4 jet fuel, diesel, and MOGAS were routinely cleaned. This area consisted of an underground waste oil tank (FST-25A1, Tank 4A) and a 10,000-gallon aboveground storage tank that received recycled water after phase separation. Visual inspection of the area indicated that the associated oil water separator had overflowed and petroleum residues were on the ground near the tank and on the edge of the drainage ditch adjacent to the tank.

The Phase I RFI report documented TPH concentrations in soil samples. These concentrations exceeded the GAEPD guidelines, indicating that a release occurred at this site.

STATUS

REGULATORY DRIVER: RCRA

RRSE: High

CONTAMINANTS OF CONCERN:

Metals, VOCs, SVOCs **MEDIA OF CONCERN:**

Soil, Groundwater

<u>PHASES</u>	Start	End
RFA	198702	198711
CS	198902	198912
RFI/CMS	199401	200409
IRA	199608	200407
CMI(C)	200002	200409
CMI(O)	200306	204709

RC: 204709

In August 1996, interim remedial action activities were conducted to address soil contamination. Activities included removal of the underground waste oil tank, the oil/water separator, the 10,000-gallon aboveground storage tank, and the pump system for the facility. In addition, 500cy of contaminated soil were removed from the site. The site was backfilled with clean material, seeded, and erosion control measures installed.

A Phase II RFI was required by GAEPD to define the extent of contamination and field work was completed in Aug 97. Free product was detected in one well in Sept 1998 and product removal was completed in Jan 00.

The Revised Final Phase II RFI report was submitted to GAEPD in Nov 98 and approved in Jan 99. The report recommended preparation of a CAP, that was submitted to GAEPD in July 99. The CAP recommends groundwater and soil remediation utilizing in-situ oxidation (such as PHOSTer II technology) to enhance bioremediation, and confirmatory sampling. The report was approved by GAEPD in Jan 00.

The PHOSter® II enhanced bioremediation system was installed in Jan 00 and began operation in Feb 00. The baseline-sampling event indicated the horizontal extent of groundwater contamination was not fully delineated. Therefore, additional site investigation was conducted in 3rd QTR FY00 delineating the site to a 500 x 250ft area (three times the original size). Monthly groundwater data from August and September 00 indicated that the dissolved plume was not fully delineated. Based on the analytical groundwater data results presented in the 3rd Annual Progress Report, it was determined that further soil excavation

FST-026 (PAGE 2 OF 2) FORMER 724TH TANKER PURGE STN (SWMU 26)

was necessary in order to address the high levels of benzene concentrations detected in the soil. A soil IRA removed approximately 2,700 cy in Jan 01 and confirmatory sampling indicated that the bottom and northwest wall of the excavation contain hydrocarbon contamination above site-specific remedial levels. Additional injectors and monitoring wells were installed in March 01 to extend the PHOSTer® II treatment system and complete the delineation of the horizontal extent of the BTEX contamination to 5ppb. The PHOSTer® II system, along with the injector assemblies and tubing were removed from the site. Quarterly sampling of groundwater began at the site in March 2002.

The 8th Semi-Annual Progress Report that was submitted to GA EPD in 3rd QTR 2003 it was recommended that additional soil samples be collected in order to define the extent of the contamination bound in a clay layer. Seasonal variations coupled with the effects of a long drought have introduced significant complications. The plume is not fully delineated.

The 9th Progress report was submitted to GEPD in 4th QTR FY04. Source delineation (Membrane Interface Probe - contaminant depth profile screening), and installation of deep wells was completed in FY04. Installation of the additional wells showed that the benzene contamination in the source area and immediate vicinity to be shallow, above 15 ft BGS. The resistivity probes showed that there is a clay layer in the downgradient area approximately 15 to 20 ft BGS.

CLEANUP STRATEGY

MNA, three dimensional Fate and Transport modeling. Quarterly groundwater monitoring will continue. Additional contamination remediation is anticipated with continued performance monitoring. Institutional controls may be required. Continue monitoring of deep and shallow wells – annually with progress reports (15 wells).

WAAF BULK FUEL SYSTEM (SWMU 35) (PAGE 1 OF 2)

SITE DESCRIPTION

The WAAF bulk fuel system (SWMU 35) consists of two underground storage tanks associated with the former airfield refuel point which were closed in-place in 1988 and two active 25,000 gallon aboveground storage tanks (ASTs) filled with JP-8, an oil/water separator, a former refuel point, and associated pipeline. Both areas (USTs and ASTs) were sources of contamination. The active portion of the fueling system was decommissioned and demolished in FY01.

The Phase I RFI was completed in December 1996 and 34 permanent monitoring wells exist at the site. There are two areas of soil contamination (petroleum hydrocarbons, 150 x

STATUS

REGULATORY: RCRA

RRSE: Medium

CONTAMINANTS: TPH, Benzene

MEDIA OF CONCERN:

Soil, Groundwater

PHASES	<u>Start</u>	<u>End</u>
RFA	199503	.199503
CS	199602	.199612
RFI/CMS	199608	.200311
CMI(C)	200310	.200409
CMI(O)	200311	203009

RIP: 200409 RC: 203009

200ft) and one co-mingled groundwater plume (benzene, 600 x 250ft) at the site. The northern area of contamination (soil and groundwater) is related to the USTs (ER,A funded) which were closed in-place and the southern plume is related to the active ASTs (OMA funded).

A groundwater pilot study (GeoCleanse, Fenton's reagent) was conducted on the northern plume in 4th QTR FY98 and Phase II RFI field work was completed in 1st QTR FY99. The Revised Final Phase II RI report, including a detailed human health and ecological risk assessment, was approved by GEPD in Feb 2001. The CAP summarized the soil removal (~1,300cy) conducted in Dec 2000 and the groundwater sampling conducted in 2001. The CAP was tentatively approved by GEPD in May 2002, pending Haz Waste permit modification which was approved in Sept 2004. The first annual CAP progress report was submitted in July 2002. An ORC was injected in summer 2004. The soil results associated with the Phase II Pilot Study (Sept 2004) indicated significantly more soil contamination than previously identified.

A pilot study consisting of bacterial injection for soil and groundwater remediation was initiated in FY03. Full-scale bacterial injection was implemented in 4th QTR FY03 and included 31 groundwater injection wells and 16 soil injection points. There are 2 USTs closed in place.

WAAF is part of a joint land use initiative with Liberty County. In FY04, a small portion of the property (less than one acre located under the tarmac), that is included in joint land use was discovered to include benzene contamination in a tight soil formation, ten to fifteen feet bgs (above water table).

WAAF BULK FUEL SYSTEM (SWMU 35) (PAGE 2 OF 2)

CLEANUP STRATEGY

Modeling and a life cycle cost analysis of alternatives is planned to be completed in FY06. It is likely that the CAP will need to be amended (late FY06 or early FY07). It is likely that further remediation will be necessary in order to reduce soil concentration levels such that the groundwater plume may be stabilized. Conduct performance monitoring for groundwater (until 2020). Confirmatory sampling will be completed once ACLs are reached.

Submit documentation to GA EPD proposing that the Regulatory Driver be changed to UST (RCRA-I). This may effect future cleanup actions.

FORMER USTS GROUP III (PAGE 1 OF 3)

SITE DESCRIPTION

In 1992 and 1993, 62 fuel tanks were removed and the excavated areas were backfilled with clean soil and compacted. The tanks were located at various locations in the cantonment area except for Tanks 248, 249, 255, and 256. Tanks 248 and 249 were located at Camp Oliver near the vehicle maintenance building. Tanks 255 and 256 were located at Taylor's Creek, a refueling station for army vehicles.

GEPD requires UST sites which are not considered a clean closure in accordance with GUST-9, be investigated within 45 days of closure. GEPD CAP-Part A regulation requires preparation of documentation showing soil and groundwater contamination and site specific groundwater flow direction. Based on GEPD's review of each CAP-Part A and/or site specific

STATUS

REGULATORY DRIVER: USTMP

RRSE: High

CONTAMINANTS OF CONCERN:

VOCs, SVOCs, TPH **MEDIA OF CONCERN:**

Soil, Groundwater

PHASES	Start	End
ISC	198810	199312
INV	199604	199610
CAP	199607	200109
IRA	199304	200306
IMP(C)	200207	200409
IMP(O)	200003	200810

RIP: 200409 RC: 200810

contamination, a CAP-Part B can be required to fully delineate the horizontal and vertical extent of contamination and to recommend the course(s) of action. However, per negotiations with GEPD, full delineation of the contamination in the CAP-Part A phase was highly encouraged.

In FY00, the UST sites from FST-25A1 and 25A2 that still required action were combined with this AEDB-R site.

NFA Sites: GEPD has approved NFA at former USTs 2/3, 5/6, 11/12, 13 (FST-CA), 15/16, 29 (FST-HB), 36/37, 38 (FST-I), 43/44, 48/49, 54/55, 62, 63, 64, 68/69, 72/73, 77/78, 80/81, 87/88, 89, 90/91, 92, 93, 95-97, 100B (FST-Z), 122, 123, 200/201, 202-204, 205/206, 219, 222/223, 225 (FST-ZN), 226/227, 234/235, 236, 239/240, 248/249, NGTC 4/5, NGTC 6/7, NGTC 16, FST25A (Tank 1), HA (Tank 28B), R (Tank 79).

USTs 257-261: USTs 257-261 (Former AAFES Gas Station) occupies an area of approximately 0.5 acres and has extensive soil and groundwater contamination (max. benzene 21,000 ug/L), which requires remediation to action levels. Site-specific conditions and facility operation concerns will result in system modifications, design complications and extended treatment duration. GEPD has approved a combination of SVE, bioventing, product removal and groundwater extraction wells. The system was installed in 3rd QTR FY02. The system operation began September 2002, it was modified in summer 2004 and is currently contracted to operate until 2007. The site benzene ACL is 713ug/L. After 2 years of operation site contaminant level has reduced to a max of 2,300ug/L (Nov 2004). Plume migration has been contained.

FORMER USTS GROUP III (PAGE 2 OF 3)

UST 255-256: Former USTs 255 & 256 were located near Building 16012 at Fort Stewart. The tanks and associated piping were excavated and removed in FY93. In FY05 Fort Stewart Directorate of Public Works performed an in-house excavation in three areas of the site where high groundwater concentrations were detected. Prior to backfilling these excavations, an oxygen releasing compound was poured into the excavation points. Termination conditions in the CAP-Part B indicates that a no further action can be submitted to Georgia Underground Storage Management (GA USTMP) once the measured benzene concentrations are below alternate concentration limit (ACL).

UST 61: Former UST 61 was located near Building 1161 at Fort Stewart. UST 61 had a capacity of 500-gal and was used for the storage of used oil. The Tank was excavated and removed in FY95. Measurable free product was measured in monitoring well 42-07.

UST 82: Former UST 82 was located near Building 1281 at Fort Stewart. The tank and associated piping were excavated and removed in FY95. GA USTMP denied a request for no further action due to the presence of free product detected in monitoring well. Benzene concentrations are currently less than the approved ACL.

UST 208 & 209: Former USTs 208 & 209 were located near Building 275 at Fort Stewart. UST 208 was used to store gasoline and UST 209 was used to store diesel. Both USTs were removed from the site in FY95. Measurable free product was observed in monitoring well 42-07.

UST 210: Former UST 210 was located near Building 272 at Fort Stewart. UST 210 had a capacity of 1,000 –gal it was used for storage of used oil. The tank and associated piping were excavated and removed in FY95. Measurable free product was observed in monitoring well 43-11

UST DESCRIPTION

The following USTs were removed and have confirmed soil and/or groundwater contamination:

Sites with Monitoring only & Free product (five tanks): Tanks 82, 61, 208&209, 210 and 255/256.

RA On-going (5 tanks): 257-261.

Recommended NFAR, pending GEPD approval (12 tanks): Tanks # 82 (FST-RA), 89 (FST-U), 94A (FST-WA),

FORMER USTS GROUP III (PAGE 3 OF 3)

CLEANUP STRATEGY

Sites pending GEPD approval for closure: Well abandonment and certification will be performed upon receipt of GEPD approval for NFA sites.

USTs 255/256: Semi-annual confirmatory sampling of 3 groundwater monitoring wells for BTEX with an annual report. Site close-out and abandonment of 24 wells FY08. **USTs 257-261:** Semi-annual confirmatory sampling of 10 groundwater monitoring wells for BTEX with an annual report. Site close-out system removal with abandonment of 21 wells FY08.

UST 61: Excavation of well with free product. Two years of semi-annual confirmatory sampling of 3 groundwater monitoring wells for BTEX with annual reports. Site close-out and abandonment of 3 wells FY09.

UST 82: Excavation of well with free product. Two years of semi-annual confirmatory sampling of 3 groundwater monitoring wells for BTEX with annual reports. Site close-out and abandonment of 7 wells FY09.

USTs 208 & 209: Excavation of well with free product. Two years of semi-annual confirmatory sampling of 3 groundwater monitoring wells for BTEX with annual reports. Site close-out and the abandonment of 7 wells FY09.

UST 210: Excavation of well with free product. Two years of semi-annual confirmatory sampling of 3 groundwater monitoring wells for BTEX with annual reports. Site close-out and the abandonment of 3 wells FY09.

IRP No Further Action Sites Summary

AEDD D		Decementation/Decemen	
AEDB-R #	Site Title	Documentation/Reason for NFA	NFA Date
FST-001	Post South Central Landfill (SWMU1)	Institutional Controls in place and approved by GA EPD November 2000	20010
FST-002	Camp Oliver Landfill – SWMU 2	Institutional Controls in place and approved by GA EPD December 8, 2000	200109
FST-003	TAC-X Landfill – SWMU 3	Institutional Controls in place and approved by GA EPD July 2001	200109
FST-004	Burn Pits 4A through 4G (SWMUs 4A-4G)	RFI recommending NFA approved June 1, 1999	199905
FST-008	Inactive EOD Area #1 (SWMU 8)	Institutional Controls in place and approved by GA EPD response considered complete.	200209
FST-009	Inactive EOD Area #2 – SWMU 9	Institutional Controls in place and approved by GA EPD response considered complete	200109
FST-010	Inactive EOD Area #3 – SWMU 10	Institutional Controls in place and approved by GA EPD response considered complete	200309
FST-011	INACTIVE EOD AREA#4-SWMU 11	Institutional Controls in place and approved by GA EPD response considered complete	200209
FST-012	ACTIVE EOD AREA (SWMUS 12A/12B/12C)	Active EOD Area transferred to Compliance Cleanup.	199608
FST-014	Old Fire Training Area (SWMU 14)	Verbal approval Fall 2000 Revised Final Phase II RFI approved December 8, 2000	200009
FST-017	DRMO Haz Waste Storage Area (SWMU 17)	Verbal approval Fall 2000 Revised Final Phase II RFI approved December 8, 2000	200009
FST-018	Ind. Wastewater Treatment Plant (SWMU 18)	Site active and not eligible for DERA funding	199608
FST-019	Old Sludge Drying Beds (SWMU 19)	Phase II RFI submitted to GA EPD April 14, 2000	200009
FST-020	Land Application System (SWMU 20)	Site active and operates under NPDES permit.	199606
FST-022	DPW Waste Oil Tanks (SWMU 22)	No Further Action, Approved By GA EPD (August 1997 SUBPART B PERMIT).	199212

IRP No Further Action Sites Summary

AEDB-R	Site Title	Documentation/Reason	NFA Date
#		for NFA	
FST-023	Wright Army Airfield Water POL Point (SWMU 23)	Active site no further action required.	199606
FST-25A1	Former Underground Storage Tanks Group I	Considered RC because all future actions for sites listed in AEDB-R will be funded and obligated under FST-25A3.	200008
FST-25A2	Former Underground Storage Tanks Group II	Considered RC because all future actions for sites listed in AEDB-R will be funded and obligated under FST-25A3.	200008
FST-027	Motor Pool Oil/Wtr Sptrs (SWMUS 27A-27V)	CAP submitted to GA EPD in July 02 recommended NFA	199606
FST-028	724th Battery Shop (SWMU 28)	Active site no further action required.	199606
FST-029	Evans Army Heliport POL Facility (SWMU 29)	Active site no further action required.	199606
FST-030	Recirculating Wash Impoundment (SWMU 30)	Active site no further action required.	199507
FST-031	DPW Asphalt Tanks (SWMU 31)	Revised Final Phase II RFI approved by GA EPD	200009
FST-032	Supply Diesel Tank (SWMU 32)	Active site no further action required.	199608
FST-033	DPW Pesticide Warehouse (SWMU 33)	Active site no further action required.	199606
FST-034	DPW Equipment Wash Rack (SWMU 34)	Active site no further action required.	199606

Initiation of IRP: 1990

Past Phase Completion Milestones:

1990 - PA, Installation - June

- IRP Assessment Initiation - August

1991 - RFA, Installation - August

1992 - SI, Installation - July

1993 - Interim Removal Action (FST-025) initiated - September

1994 - RFI, Phase I: (FST-001, 002, 003, 004, 009, 010, 011, 012, 014, 018, 023, 025, 027, 028, 030, 031, 034) - August

1995 - Remedial Design (FST-013) - January

1996 - Interim Removal Action (FST-026) - August

Interim Removal Action (FST-025) completed - October

1997 - CAP - Part As

1998 - Phase II RI (FST-001, 002, 003, 004, 009, 010, 011, 014, 017, 019, 24B, 026, 031) - CAP-Part A/Part B (FST-25A1, 25A2, 25A3)

1999 - CAP (FST-026)

- CAP Part Bs (FST-25A3)
- RI (FST-001, 002, 003, 009, 010, 011, 013, 014, 017, 019, 024, 25A1, 25A2, 031, 035)
- LTM (FST-25A3)

2000- RI/FS (investigation) (FST-024)

- RI/FS (CAP) (FST-002, 003, 009, 010, 011, 013, 019, 035)
- RA(C) (FST-25A3, 026)
- LTM (FST-25A1, 25A2, 25A3)
- UST CAPs (FST-25A1, 25A2, 25A3)

2001 - RI/FS (investigation) (FST-002, 003, 009, 010, 011, 013, 024, 035, 25A3)

- Final RA (FST-001, 002, 003, 026)
- IRA (FST-25A3)

2002 - RA at FST-008, 009, 011

- IRA at FST-013
- RI/FS at FST-035

IRP Schedule

2003 - RI/FS at FST-024, 035

- RA at FST-010, 013, 25A3
- RA(O) at FST-026, 25A3
- LTM at FST-001, 002, 003, 009, 011, 024

2004 - RI/FS at FST-024

- RA(C) at FST-024
- RA(O) at FST-013, 024, 026, 035, 25A3
- LTM at FST-001, 011, 25A3

Projected Record of Decision (ROD)/Decision Document (DD) Approval Dates: No more needed.

Projected Construction Completion Date of IRP and Removal from NPL: 2007

Schedule for Next Five Year Review: 2010

Estimated Completion Date of IRP (including LTM phase): 2047

Ft Stewart IRP Schedule

(Based on current funding constraints)

AEDB-	Site	Dhasa	EVOZ	EVOC	EVOC	EVAO	EVAA	EVAC	EV40	EVAA	EVAE.
R#	Title	Phase	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15+
FST-001	Post South Central Landfill (SWMU 1)	LTM									203109
FST-011	Inactive EOD Area #4 (SWMU 11)	LTM									203201
FST-013	Fire Training Area at WAAF (SWMU 13)	CMI(C)									
FST-024	Old Paint Booth (SWMU 24B) Bld 1056	CMI(O)									
FST-026	Former 724th Tanker Purge Stn (SWMU 26)	CMI(O) LTM									203106
FST-035	WAAF Bulk Fuel System (SWMU 35)	CMI(O)									202009
FST- 25A3	Former USTs:	CMI(O)									
	GR III,	CMI(O)									
	various	CMI(O)									
	phases	CMI(O)									
		CMI(O)									
		CMI(O)									
		CMI(O)									



Prior Year Funds

Total Funding up to FY04: \$19,615K

<u>Year</u>	Site Infori	<u>mation</u>	<u>Expenditures</u>	FY Total
FY05	FST-013	RAO	109.80	_
	FST-024	RAO	55.00	
	FST-026	RAO	195.96	
	FST-035	RAO	78.99	
	FST-25A3	RAO	443.32	\$ 883K

Total Funding up to FY05: \$20,498K

Current Year Requirements

<u>Year</u>	Site Information	on	Expenditures	FY Total
FY06	FST-001	LTM	1.00	_
	FST-011	LTM	1.00	
	FST-013	RAO	97.48	
	FST-013	RAO	14.52	
	FST-024	RAO	50.00	
	FST-024	RAO	3.00	
	FST-026	RAO	104.66	
	FST-026	RAO	145.86	
	FST-035	RAO	217.73	
	FST-035	RAO	20.00	
	FST-25A3	RAO	585.56	
	FST-25A3	RAO	53.11	\$1,017K

Total Funding up to FY06: \$21,515K

Total Future Requirements (FY07+): \$5,738K

Total IR Program Cost (from inception to completion of the IRP): \$27,253K

FORT STEWART

Military Munitions Response Program



Total AEDB-R MMRP Sites/AEDB-R Sites with Response Complete: 8/0

AEDB-R Site Types:

8 Unexploded Munitions/Ordnance

Most Widespread Contaminants of Concern: Unexploded Ordinances (UXO), Discarded Military Munitions (DMM), and Munitions Constituents (MC).

Media of Concern: Groundwater, Soil, Sediment, and Surface Water.

Completed REM/IRA/RA: None

Total MMRP Funding:

Prior years (up to FY05):	\$	146,000
Current Year (FY06):	\$	438,000
Future Requirements (FY07+):	\$17	7,784,000
Total	\$18	3,368,000

Duration of MMRP:

Year of MMRP Inception:	2003
Year of MMRP RIP/RC:	2017
Year of MMRP Completion Including LTM:	2047

MMRP Contamination Assessment

DoD's environmental cleanup activities began in 1975 under IRP before any formal federal requirements or program was established. DoD instituted its IRP to address past practices that often did not take long-term environmental effects into account. Environmental laws driving the present DERP is CERCLA (1980), commonly known as Superfund. The DERP was formally established by Section 211 of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and is codified in Sections 2710-2710 of Title 10 of the United States Code (USC). SARA set requirements for the DERP and its funding mechanisms, the Defense Environmental Restoration Account (DERA). DERA funding was available in 1984 before the formal establishment of the DERP. Currently there are eight sites listed under the Fort Stewart MMRP program. All eight sites are scheduled for sight investigations in 2006. No off-post contamination or responses have been issued. No complicating factors or uncertainties have been identified.

FORT STEWART

Military Munitions Response Program Site Descriptions

FSTW-001-R-01 ANTI-AIRCRAFT RANGE 1

SITE DESCRIPTION

This Anti-Aircraft Range consists of approximately 42 acres of land, which was originally part of the buffer area of an anti-aircraft range (ordnance unknown) approximately 63,906 acres in size. This range was operational from 1957 through 1964. A portion of this former range fan now makes up what is currently known as the Non-Commissioned Officer (NCO) Academy located in the northern most area of the installation. It is not known what type of ordnance was used in this area. It was assumed that based on several factors (the type (Anti-Aircraft), size, and operational time frame of the range), large caliber (37MM and larger) munitions were used at this site. No EOD calls have been reported at the site. Additionally, no information and no reports from installation personnel regard UXO investigation being performed on the site were obtained during the site visit.

STATUS

REGULATORY DRIVER: CERCLA

RAC Score: 2 - Serious

CONTAMINANTS OF CONCERN:

UXO, DMM, MC

MEDIA OF CONCERN: Soil, Groundwater, Sediment, Surface

Water

PHASES	Start	End
PA	200310	200310
SI	200510	200609
RI	201410	201509
RD	201510	201609
RA(C)	201610	201709
I TM	201701	204709

RC: 201709

CLEANUP STRATEGY

FSTW-002-R-01 ANTI-AIRCRAFT RANGE 90MM

SITE DESCRIPTION

This 90 MM Anti-Aircraft Range (operational during 1941, 1957, 1962, and 1964) consists of approximately 77 acres of a former 90MM antiaircraft range fan, located northwest of the cantonment area. This 77-acre portion of the former range fan now serves as an ammunition supply point. The area is comprised of portions of the following overlapping range fans: the impact area of an Anti-Aircraft Range 90MM (total acreage approximately 75,513, operational 1941, 1957, 1962, and 1964); the impact area of an Anti-Aircraft Range 40MM (total acreage approximately 25,288, operational 1941); the impact area of an additional/separate Anti-Aircraft Range 40MM (total acreage approximately 11,586, operational 1941); the impact area of a Tank Range where unknown types of ordnance (total acreage approximately 3,517 operational

STATUS

REGULATORY DRIVER: CERCLA

RAC Score: 3 - Moderate

CONTAMINANTS OF CONCERN:

UXO, DMM, MC

MEDIA OF CONCERN: Soil, Groundwater, Sediment, Surface

Water

PHASES	Start	End
PA	200310	200310
SI	200510	200609
RI	201410	201509
RD	201510	201609
RA(C)	201610	201709
LTM	201710	204709

RC: 201709

1957, 1962, and 1964); and finally the impact area of a Tank Range where unknown types of ordnance (total acreage approximately 30,082 operational 1957, 1962, and 1964). According to information obtained during the site visit, 90MM anti- aircraft high explosives (HE), and 40MM anti-aircraft HE were used at the site. The EOD has responded to several emergency calls in the area. All of the responses were in the same area. The OE encountered included C-4 plastic explosives (secondary explosives), and GM Dragon Missiles (guided missiles), M-7 grenades (a riot control agent), and MK-2 fragmentation hand grenades. The dates and exact number of occurrences of the EOD calls are not known. No information and no reports from installation personnel regarding UXO investigation being performed on the site were obtained during the site visit.

CLEANUP STRATEGY

FSTW-003-R-01 ANTI-AIRCRAFT RANGE 90MM

SITE DESCRIPTION

The 90MM Anti-Tank Range included approximately 124 acres, and is in the area currently used as an active landfill west of the cantonment area. The area is comprised of the following overlapping range fans: the buffer area (near the firing point) of an Anti-Tank Range 90MM (total acreage approximately 16,128 operational in 1941); the buffer area (near the firing point) of an Anti-Aircraft Range 40MM (total acreage approximately 25,288, operational in 1941); and a portion of a Small Arms Range (total acreage approximately 1,241, operational in 1941). According to information obtained during the site visit, 90MM anti-tank HE, 40MM antiaircraft HE, and small arms were used at the site. No EOD calls have been reported at the site. Additionally, no information and no reports from

STATUS

REGULATORY DRIVER: CERCLA

RAC Score: 3 - Moderate

CONTAMINANTS OF CONCERN:

UXO, DMM, MC

MEDIA OF CONCERN: Soil, Groundwater, Sediment, Surface

Water

PHASES	Start	End		
PA	200310	200310		
SI	200510	200609		
RI	201410	201509		
RD	201510	201609		
RA(C)	201610	201709		
LTM	201710	204709		
RC: 201709				

installation personnel regarding a UXO investigation being performed on the site were obtained during the site visit.

CLEANUP STRATEGY

FSTW-004-R-01 HAND GRENADE COURSE

SITE DESCRIPTION

The Hand Grenade Course (operational during 1962, 1964, and 1971) is approximately 67 acres. and is located, in an isolated area of the installation, northwest of the cantonment area. The area is comprised of the following overlapping ranges fans: a Hand Grenade Course (operational during 1962, 1964, and 1971); a portion of the impact area of an Anti-Tank Range 90MM (operational during 1941); a portion of the impact area of an Anti-Aircraft Range 40MM (operational during 1941); a portion of the firing point of a Small Arms Range (operational during 1994). According to information obtained during the site visit, small arms, 90MM anti-tank HE, and 90MM anti-aircraft HE were used at this site. It is not known what type(s) of hand grenades were used at the site; therefore it was assumed that all types of hand

STATUS

REGUALTORY DRIVER: CERCLA RAC Score: 5- Negligible Risk CONTAMINANTS OF CONCERN: UXO, DMM, MC

MEDIA OF CONCERN: Soil, Groundwater, Sediment, Surface

Water

PHASES	Start	End
PA	200310	200310
SI	200510	200609
RI	201410	201509
RD	201510	201609
RA(C)	201610	201709
LTM	201710	204709

RC: 201709

grenades might have been used. No EOD calls have been reported at the site. Additionally, no information and no reports from installation personnel regarding a UXO investigation being performed on the site were obtained during the site visit.

CLEANUP STRATEGY

FSTW-005-R-01 SMALL ARMS RANGE 1

SITE DESCRIPTION

Small Arms Range-1 (operational during 1962, and 1964) consists of an approximately 136-acre portion of a former small arms range, and is located in the area currently known as the Evans Heliport/Airfield northeast of the cantonment area. According to information obtained during the site visit, only small arms were used at this site. No EOD calls have been reported at the site. Additionally, no information and no reports from installation personnel regarding a UXO investigation being performed on the site were obtained during the site visit.

STATUS

REGULATORY DRIVER: CERCLA RAC Score: 5 - Negligible Risk CONTAMINANTS OF CONCERN:

UXO, DMM, MC

MEDIA OF CONCERN: Soil, Groundwater, Sediment, Surface

Water

PHASES	Start	End
PA	200310	200310
SI	200510	200609
RI	201410	201509
RD	201510	201609
RA(C)	201610	201709

RC: 201709

CLEANUP STRATEGY

FSTW-006-R-01 SMALL ARMS RANGE 2

SITE DESCRIPTION

Small Arms Range-2 (operational during 1957, 1962, and 1971) consists of an approximately 4-acre portion of a former small arms range, and overlaps a portion of the Cantonment area along the western boundary. According to information obtained during the site visit, only small arms were used at this site. No EOD calls have been reported at the site. Additionally, no information and no reports from installation personnel regarding a UXO investigation being performed on the site were obtained during the site visit.

STATUS

REGULATORY DRIVER: CERCLA **RAC Score:** 5 – Negligible Risk

CONTAMINANTS: UXO, DMM, MC.

MEDIA OF CONCERN: Soil, Groundwater, Sediment, Surface

Water

PHASES	Start	End
PA	200310	200310
SI	200510	200609
RI	201410	201509
RD	201510	201609
RA(C)	201610	201709

RC: 201709

CLEANUP STRATEGY

FSTW-007-R-01 SMALL ARMS RANGE 3

SITE DESCRIPTION

Small Arms Range-3 (operational during 1964) consists of approximately 32 acres, and is located in the area northeast of the cantonment area within one mile of the Holbrook Pond Recreational Area. According to information obtained during the site visit, only small arms were used at this site. This area is currently undeveloped. No EOD calls have been reported at the site. Additionally, no information and no reports from installation personnel regarding a UXO investigation being performed on the site were obtained during the site visit.

STATUS

REGULATORY DRIVER: CERCLA RAC Score: 5 - Negligible Risk CONTAMINANTS OF CONCERN:

UXO, DMM, MC

MEDIA OF CONCERN: Soil, Groundwater, Sediment, Surface

Water

<u>PHASES</u>	Start	<u>End</u>
PA	200310	200310
SI	200510	<mark>200609</mark>
RI	201410	201509
RD	201510	201609
RA(C)	201610	201709
	RC: 20170	9

CLEANUP STRATEGY

FSTW-008-R-01 HERO ROAD TRENCH AREA

SITE DESCRIPTION

The site was identified when a former Directorate of Public Works (DPW) staff member reported allegations to the DPW Environmental Office that materials (i.e. mustard gas) had been buried in the DPW Family Housing Maintenance Parking Lot located on Hero Road. The DPW Environmental staff started investigation of the January 2003 allegations to further determine the validity of the statements. Aerial photographs were collected and reviewed of the area. These historical photographs show the area was not developed until late 1940. The aerial photographs indicate area disturbance due to unspecific activity (burial activities) during the period January 1941 until January 1957. The Installation's Sewage Treatment Plant and Incinerator (formerly located in the area of the

STATUS

REGULATORY DRIVER: CERCLA

RAC Score: 3 - Moderate

CONTAMINANTS OF CONCERN:

UXO, DMM, MC

MEDIA OF CONCERN: Soil, Groundwater, Sediment, Surface

Water

PHASES	Start	End		
RFA	200304	200312		
SI	200510	200609		
RFI	201410	201410		
IRA	200310	200409		
CMI(C)	201510	201609		
LTM	201610	203109		
RC: 201609				

DPW Housing Maintenance Yard south of the FS/Hinesville Regional Wastewater Treatment Plant) were noted in close proximity to the AOC. Additionally, a former Gas Chamber existed on the corner of French Road and COE Avenue, also in close proximity of the AOC. The review of Department of Defense documents did find documentation indicating that mustard gas in the form of Set, Gas Identification, Detonation, and M1 was on the authorized Table of Equipment for units posted at Fort Stewart during WWII.

This site was signed and fenced in FY04-05 as part of an interim action with MMRP funds.

CLEANUP STRATEGY

Institutional Controls and Five Year Review will be performed.

MMRP Schedule

Initiation of MMRP: 2003

Past Phase Completion Milestones:

Construction Complete of Fencing for FSTW-008-R-01 2005

Projected ROD/DD Approval Dates: 2015

Projected Construction Completion: 2017

Schedule for Five Year Reviews: Unknown

Estimated Completion Date of IRP (including LTM phase): 2047

Ft Stewart MMRP Schedule

(Based on current funding constraints)

AEDB-R#	PHASE	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15+
FTSW-001-	SI									
R-01	RIFS									201509
	RD									201609
	RA(C)									201709
	LTM									204709
FTSW-002-	SI									
R-01	RIFS									201509
	RD									201609
	RA(C)									201709
	LTM									204709
FTSW-003-	SI									
R-01	RIFS									201509
	RD									201609
	RA(C)									201709
	LTM									204709
FTSW-004-	RIFS									201509
R-01	RD									201609
	RA(C)									201709
	LTM									204709
FTSW-005-	SI									
R-01	RIFS									201509
	RD									201609
	RA(C)									201709
FTSW-006-	SI									
R-01	RIFS									201509
	RD									201609
	RA(C)									201709
FTSW-007- R-01	SI									
	RIFS									201509
	RD									201609
	RA(C)									201709
FTSW-008-	RIFS									201510
R-01	RA(C)									201609
	LTM									203109

MMRP Costs

Prior Years Funds

<u>Year</u>	Site Information		Expenditures	FY Total
FY04	FSTW-008-R-01			\$146,000
FY05	FSTW-001-R-01	RI	78K	
	FSTW-002-R-01	RI	78K	
	FSTW-003-R-01	RI	78K	
	FSTW-005-R-01	RI	78K	
	FSTW-006-R-01	RI	56K	
	FSTW-007-R-01	RI	70K	\$438,000

Total Funding up to FY05: \$ 584,000

Current Year Funds

<u>Year</u>	Site Information	Expenditures	FY Total
FY06			\$438,000

Total Funding FY06: \$438,000

Total Future Requirements: \$17,784,000

Total MMRP Program Costs: \$18,368,000

Community Involvement

Fort Stewart/HAAF conducted community interest surveys during FY97, FY00 and FY03 to evaluate community interest in the establishment of a Restoration Advisory Board (RAB). A public notification announcing Fort Stewart/HAAF's community interest survey for a RAB was published in *The Savannah Morning News* and *The Coastal Courier* on August 1997, June 2000 and May 2003. The individual surveys for public officials were mailed in September 1997, June 2000 and May 2003, respectively. To date, Fort Stewart/HAAF has not received sufficient response to these public notifications and mailings to warrant establishment of a RAB.

Fort Stewart/HAAF will continue to monitor the public's desire to form a RAB and will react accordingly. Surveys will be conducted on a regular basis to determine the public's interest in Fort Stewart's IRP. Next survey is tentatively scheduled for FY07.